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CLAIMS

1. Device for scanning and/or recognizing one or more barcodes, comprising:

- a laser light source for transmitting laser light;
- a rotatable polygonal mirror for reflecting the transmitted laser light;
- a number of fixedly disposed flat mirrors for reflecting laser light;
- a pick-up element for picking up laser light scattered by a barcode;
- a compact housing to be handheld in which the laser light source, the polygonal mirror, the flat mirrors and the pick-up element are arranged, wherein the housing is completely constructed from a bottom side, a top side, a standing rear wall, a standing front wall and two standing side walls arranged therebetween and wherein the distance between the standing walls amounts to 3-14 cm;

characterized in that the bottom side of the housing is substantially flat for placement of the housing without a holder and scanning is performed through said standing front wall only when placed on said bottom side.

2. Device according to claim 1, comprising:

- position determining means arranged in the housing for determining the position of the rotatable polygonal mirror;
- control means which are connected to the position determining means and the laser light source and which switch the laser light source on or off depending on the position of the rotatable polygonal mirror;

wherein dependent on the switching on and off a omni-directional scan pattern or a line pattern is cast, both

scan patterns being cast through one and the same window in the housing.

3. Device as claimed in claim 1 or 2, comprising a mirror arranged in the housing and foldable between two positions, in the first position of which a substantially flat mirror surface of the mirror reflects the laser light incident thereon and in the second position of which a substantially concave mirror surface reflects the laser light incident thereon.

4. Device as claimed in claim 3, comprising

- folding means arranged in the housing which are connected to the foldable mirror and which fold it between the two positions;

- operating means arranged partially inside and partially outside the housing which are connected to the folding means.

5. Device as claimed in claim 4, wherein a part of the operating means protrude from the flat bottom side of the housing.

6. Device as claimed in claim 4 or 5, wherein the folding means comprise an electric motor and the operating means comprise a switch for switching the electric motor on and/or off.

7. Device as claimed in claim 4 or 5, wherein the operating means comprise an operating member protruding partially through a guide opening in the housing, wherein the operating member can be guided into the housing whereby the folding means carry the foldable mirror into the first position and wherein spring means arranged in the housing urge the operating member partially out of the housing whereby the folding means carry the foldable mirror into the second position.

8. Device as claimed in claim 7, wherein the operating member is provided with locking means for locking the operating member with the foldable mirror in the first position.

9. Device as claimed in claim 2, wherein the position determining means comprise:

- sensor means which detect laser light reflected from the polygonal mirror;

- rotation speed determining means which determine the rotation speed of the rotatable polygonal mirror.

10. Device as claimed in at least one of the foregoing claims, wherein the rotatable polygonal mirror comprises a central part and mirror surfaces standing from a first side thereof and is provided on the other side with receiving means which receive a drive shaft for rotating driving of the rotatable polygonal mirror.

11. Device for scanning and/or recognizing one or more barcodes, which comprises a housing in which are arranged:

- a laser light source for transmitting laser light;

- a rotatable polygonal mirror for reflecting the transmitted laser light;

- a number of fixedly disposed flat mirrors for reflecting laser light;

- a pick-up element for picking up laser light scattered by a barcode;

- a mirror foldable between two positions, in the first position of which a first mirror surface reflects the laser light incident thereon and in the second position of which a second mirror surface reflects the laser light incident thereon.

12. Device as claimed in claim 11, wherein the first mirror surface has a substantially flat surface and the second mirror surface has a substantially concave surface.

13. Device for scanning and/or recognizing one or more barcodes, which comprises a housing in which are arranged:

- a laser light source for transmitting laser light;

- a rotatable polygonal mirror for reflecting the transmitted laser light;

- a number of fixedly disposed flat mirrors for reflecting laser light;
- a pick-up element for picking up laser light scattered by a barcode;
- drive means for driving a rotating support member, wherein the polygonal mirror is placed with the outer ends thereof on the rotating support member.

14. Device as claimed in claim 13, wherein the ends of the polygonal mirror are fixed at least partially to the rotating support member.

15. Device as claimed in claim 13, wherein double-sided tape provided with adhesive means is arranged between the ends of the polygonal mirror and the rotating support member.

16. Device as claimed in claim 13, 14, or 15, wherein the ends of the polygonal mirror are provided with centering pins which engage round or in the rotating support member and which centre the polygonal mirror relative to the drive means.

17. Device as claimed in at least one of the claims 13-16, wherein a protruding gripping component is fixed to the polygonal mirror.

18. Device as claimed in any of the foregoing claims, wherein the height-width ratio of the polygonal mirror has a value of about 1 or higher.

19. Device as claimed in claim 18, wherein a laser light source adjusting member is fixed to the laser light source, which positions the laser light source in only the horizontal direction.

20. Device as claimed in any of the foregoing claims, wherein the rotatable polygonal mirror is arranged in the vicinity of a first corner of the housing and the fixedly disposed flat mirrors and/or the foldable mirror are arranged in the vicinity of an opposite corner of the housing.

21. Device as claimed in any of the foregoing claims, wherein a resilient holder is arranged around at least a part of the housing.

22. Method for scanning and/or recognizing one or more barcodes, wherein the device as claimed in at least one of the foregoing claims is applied.

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